

ABSTRACT OF THE DISCLOSURE

The present invention relates to a switching device to be irreversibly switched from an electrically isolating off-state into an electrically conducting on-state for use in a configurable interconnect, comprising two separate electrodes, at least one of which being a reactive metal electrode, and a solid state electrolyte arranged between said electrodes and being capable of electrically isolating said electrodes to define said off-state, said electrodes and said solid state electrolyte forming a redox-system having a mini-mum voltage ("turn-on voltage") to start a redox reaction, the redox reaction resulting in the generation of metal ions to be released into said solid state electrolyte, the metal ions being reduced to increase a metal concentration within said solid state electrolyte, wherein an increase of said metal concentration results in a conductive metallic connection bridging the electrodes to define the on-state.

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